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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,900	08/17/2005	Manfred Malle	5696.P0002US	2982
23474 7590 09/24/2007 FLYNN THIEL BOUTELL & TANIS, P.C. 2026 RAMBLING ROAD KALAMAZOO, MI 49008-1631			EXAMINER LUONG, VINH	
			ART UNIT 3682	PAPER NUMBER
			MAIL DATE 09/24/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/509,900

**Applicant(s)**

MALLE, MANFRED

**Examiner**

Vinh T. Luong

**Art Unit**

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2007.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance: See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
Vinh T. Luong  
Primary Examiner

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: Attachment.

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1. The amendment filed on July 16, 2007 has been entered.
2. The drawings were received on July 16, 2007. These drawings are accepted by the Examiner.
3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter, such as, "a first position" in Claim 1, and "an engaging element" and "bushings" in Claim 13. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction is required.
4. Claim 13 is objected to because of the following informalities: no antecedent basis is seen for the term "the bicycle" (singular, emphasis) in Claim 13. Appropriate correction is required.
5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The terms, such as, "rotatable" and "displaceable" in Claim 1, "non-movable" in Claim 5, and "rotatable," "attachable," "movable," and "may be detached" in Claim 13 are vague and indefinite in the sense that things which may be done are not required to be done. For example, in Claim 1, the pedal is rotatable but is not structurally required to be rotated about an axis. See "discardable" in *Mathis v. Hydro Air Industries*, 1 USPQ2d 1513, 1527 (D.C. Calif. 1986), "crimpable" in *Application of Collier*, 158 USPQ 266 (CCPA 1968), "removable" in *In re Burke Inc.*, 22 USPQ2d 1368, 1372 (D.C. Calif. 1992), and "comparable" in *Ex parte Anderson*, 21 USPQ2d 1241, 1249 (BPAI 1992).

It is unclear whether:

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(a) The terms that appear at least twice, such as, “an elastic force” in Claim 1 and “spring force” in Claim 13 refer to the same or different things. See double inclusion in MPEP 2173.05(o);

(b) A confusing variety of terms, such as, “an elastic force,” “elastic force,” and “at least one spring” in Claim 3/1 refer to the same or different things. See MPEP 608.01(o) and double inclusion in MPEP 2173.05(o);

(c) Which position is “a first position” in Claim 1. Applicant is respectfully suggested to identify each claimed feature with reference to the drawings; and

(d) What structures define the claimed elements, such as, “an engaging element” and “bushings” in Claim 13. Applicant is respectfully suggested to identify each claimed feature with reference to the drawings.

7. Claims 1-7 and 9-13, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Lyotard (FR 2624470).

Regarding claim 1, Lyotard teaches a pedal system for bicycles comprising a shoe insert 1 and has a detent element  $1g^1$ ,  $1g^2$  (FIG. 1) and a pedal 4 for mounting on the bicycle, *rotatable* about an axis (see Attachment hereinafter “Att.”), and which pedal 4 has a seat 4c, 7 for the detent element  $1g^1$ ,  $1g^2$ , in which seat said detent element  $1g^1$ ,  $1g^2$  is locked by an elastic force, and from which seat 4c, 7 same is released by carrying out a rotating movement, wherein the seat 4c, 7 is formed between two seat parts 4c and 7, which are designed rotationally symmetrically with respect to the pedal axis (Att.), which are held in a first position by said elastic force, and are displaceable from one another against said elastic force in direction of the pedal axis (Att.).

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Regarding claim 2, the seat parts 4c and 7 comprise receiving grooves 4e and 7c (Att.) facing one another.

Regarding claim 3, one (7) of the two seat parts 4c and 7 is displaced against the force of at least one spring (Att.).

Regarding claim 4, one of the seat parts is part of a first sleeve 4c, 4d which is supported rotatably with respect to the axis (Att.) of the pedal 4, and the other seat part 7 is part of a second sleeve 7, which is supported movably on the first sleeve 4c, 4d (FIG. 2).

Regarding claim 5, the first sleeve 4c, 4d is non-movable with respect to the axis (Att.) of the pedal 4, and the second sleeve 7 is movable against said at least one spring.

Regarding claim 6, at least one compression spring (FIGS. 1 and 2, see Att.) is provided as the spring, which compression spring is supported at a first end on an abutment (Att.) operatively connected to the sleeve 4c, 4d and at a second end (Att.) on the second sleeve 7.

Regarding claim 7, the first sleeve 4c, 4d is supported rotatably by means of ball bearings CB on the axis part of the pedal 4.

Regarding claim 9, the detent element  $1g^1$ ,  $1g^2$  has side surfaces, which have in particular centrally each one cam 1f (FIGS. 5 and 6).

Regarding claim 10, the detent element  $1g^1$ ,  $1g^2$  is connected to a control element 1a which acts centeringly with respect to the seat of the pedal 4.

Regarding claim 11, the control element 1a has supporting wings (Att.) extending laterally of the detent element  $1g^1$ ,  $1g^2$ , the insides of which supporting wings 1a (Att.) come into contact or are in contact with outer surface areas of the sleeves 4c, 4d and 7, which outer surface areas extend cylindrically and rotationally symmetrically with respect to the pedal axis (Att.),

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and are curved with a radius (at 1f in FIG. 4), which is smaller than the radius of the outer surfaces of the sleeves 4c and 7 as seen in FIG. 4.

Regarding claim 12, the control element 1 (Att.) is connected to a shoe (Att.).

Regarding Claim 13, Lyotard teaches a pedal system for bicycles with a shoe insert 1 that is attachable to a shoe (Att.) and has an engaging element  $1g^1$ ,  $1g^2$ , and with a pedal 4 that is attachable to the bicycle and is rotatable about an axle 3, and has a seating 4c, 7 for the engaging element  $1g^1$ ,  $1g^2$ , in which the engaging element  $1g^1$ ,  $1g^2$  is engageable against a spring force (Att.) and from which the engaging element  $1g^1$ ,  $1g^2$  may be detached by performing a rotating movement, wherein the seating 4c, 7 is conformed between two seating parts 4c and 7 that are constructed rotationally symmetrically about the axle 3 of the pedal 4, and which are movable away from each other towards the axle 3 of the pedal 4 against said spring force (Att.), and are components of bushings 4 and 7 with cylindrical external surfaces, wherein the engaging element  $1g^1$ ,  $1g^2$  is an elongated part (FIGS. 5 and 6) that extends perpendicularly to the pedal axle 3 (FIG. 3) when engaged, and has two cams 1f (FIGS. 5 and 6) which clasp below the seating parts 4c and 7 in the engaged position (FIG. 4), and the shoe insert 1 has a control element 1a which is forced against the cylindrical outer surfaces of the bushings 4 and 7 in such a manner that when the shoe insert 1 is rotated to release the engaging element  $1g^1$ ,  $1g^2$ , the engaging element  $1g^1$ ,  $1g^2$  is raised (FIG. 7).

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claim 8, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Lyotard.

Regarding claim 8, Lyotard's detent element  $1g^1$ ,  $1g^2$  is an elongated component which has a wedge-shaped designed area for positioning between the seat parts 4c, 4d and 7. *Ibid.* abstract.

It is common knowledge in the art to form the Lyotard's wedge-shaped design area having a tapered portion for facilitating the alignment of the detent element  $1g^1$ ,  $1g^2$  with the seat parts 4c, 4d and 7. The tapered portion of the wedge is notoriously well known as evidenced by, e.g., publications The Free Dictionary, Wedge (mechanical design), and Wedge attached.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form Lyotard's wedge-shaped design area having a tapered portion for facilitating the aligning of the detent element with the seat parts as taught or suggested by common knowledge in the art. *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007); and *Ex parte Smith*, 83 USPQ2d 1509 (BPAI 2007).

11. Applicant's arguments filed July 16, 2007 have been fully considered but they are not persuasive.

## DRAWINGS

The replacement drawings have been accepted.

### 35 USC 112

Applicant stated “[i]n light of the foregoing amendments, the objections cited by the Examiner are believed to be addressed.” The Examiner respectfully submits that the amended claims still are vague and indefinite as seen in the rejection above.

### 35 USC 102(b)

Applicant contended:

Lyotard '470 therefore does not disclose that *the shoe insert is released by carrying out a rotating movement, as required by independent claim 1, or that the engaging element is raised when the shoe insert is rotated to release the engaging element, as required by new independent claim 13.* Lyotard '470 further does not disclose the detent element which has a tapered portion for aligning the detent element between the seat parts, as required by claim 8. *The "wedge" referred to in the abstract of Lyotard '470 is the common term for a shoe insert, and is not related to the actual shape of the detent element that facilitates alignment with seat parts according to the claimed invention.* Lyotard '470 further does not disclose the supporting wings, the insides of which come into contact with outer surface areas of the sleeves which extend cylindrically and rotationally symmetrically with respect to the pedal axis, as required by claim 11. (Emphasis added).

It is well settled that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Moreover, it is well settled that similar



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structures would behave similarly. *In re Merck & Co., Inc.*, 231 USPQ2d 375 (CAFC 1986). Further, a reference may be from an entirely different field of endeavor than that of the claimed invention or may be directed to an entirely different problem from the one addressed by the inventor, yet the reference will still anticipate if it explicitly or inherently discloses every limitation recited in the claims. *In re Schreiber*, 44 USPQ2d 1429 (CAFC 1997). See also *Ex parte Smith, supra*.

In the instant case, as noted, Lyotard's pedal comprises the fixed seat part 4 and the movable seat part 7. Therefore, in order to engage the shoe insert 1 with the pedal, the bicyclist inherently must rotate the foot as shown in Lyotard's FIG. 7 so that the bicyclist can slide the insert 1 into the space defined by the seats 4 and 7. In other words, the seat 7 must be moved in order to expand the space between the seats 4 and 7 to let the insert 1 slide therein. Similarly, when the bicyclist desires to disengage or release the insert 1 from the pedal, the bicyclist must raise one side of the insert 1 as seen in FIG. 7 so that the space between the seats 4 and 7 can be expanded to let the insert 1 get out. The instant mode of operation is notoriously well known in bicycle shoe cleat art as evidenced by, e.g., FIGS. 17-22 of US Patent No. 4,488,453 issued to Drugeon et al.; FIG. 7 of US Patent No. 4,686,867 issued to Bernard et al.; FIGS. 4-7 of US Patent No. 4,932,287 issued to Ramos; FIGS. 9-11 of US Patent No. 5,060,537 issued to Nagano; FIGS. 2 and 3 of US Patent No. 5,423,233 issued to Peyre et al.; and FIGS. 4-6 of US Patent No. 5,699,699 issued to Nagano. Simply put, Lyotard's shoe insert and engaging/detent element inherently operate as claimed.

On the other hand, the Examiner is mindful that the claims drawn to an apparatus must distinguish from prior art in terms of structure rather than function. *In re Danly*, 120 USPQ 528

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(CCPA 1959) and MPEP 2114. Applicant does not claim patentable distinguishing structure(s) over Lyotard but tandem relies on the mode of use of the shoe insert or engaging element. Our reviewing Court in *Schreiber* stated that “Although *Schreiber* is correct that Harz does not address the use of the disclosed structure to dispense popcorn, the absence of a disclosure relating to function does not defeat the Board's finding of anticipation.” See also *Ex parte Masham*, 2 USPQ2d 1647 (BPAI 1987). Hence, Applicant’s arguments above are unpersuasive.

With respect to Claim 8, Applicant stated: “the ‘wedge’ referred to in the abstract of Lyotard is the common term for a shoe insert, and is not related to the actual shape of the detent element that facilitates alignment with seat parts according to the claimed invention.” However, Applicant did not cite any reference or evidence to support this statement. It is well settled that an expert’s opinion on the ultimate legal issue must be supported by some thing more than a conclusory statement. *In re Buchner*, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991).

In the instant case, the Examiner respectfully submits that the common term for the shoe insert is “a cleat,” not “a wedge.” See, e.g., the cleat 30 in US Patent No. 5,699,699 issued to Nagano cited herein.

By using the term “wedge,” Lyotard implies a tapered portion as evidenced by ordinary and customary meaning of the term “wedge” in publications cited herein. Therefore, Lyotard implicitly teaches the tapered portion as claimed. Alternatively, common knowledge in the art would form the wedge of Lyotard having a tapered portion in order to facilitate the sliding of the shoe insert into and out of the detent element. Thus, Claim 8 is not patentable as mandated by *KSR, supra*.

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In light of the foregoing, the Examiner respectfully declines Applicant's request to put this case in the condition for allowance.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vinh T. Luong whose telephone number is 571-272-7109. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Luong

September 20, 2007



Vinh T. Luong  
Primary Examiner

# **ATTACHMENT**



